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ABSTRACT

This paper offers a comprehensive approach to creating a data base on learning to teach. It is organized chronologically around a learning-to-teach continuum. The first section deals with the pretraining phase, before prospective teachers even realize they are learning things that will shape their future teaching. The second section looks at the preservice phase, when future teachers undertake their formal preparation. The third section examines the induction phase, which coincides with the first year of teaching. The fourth section examines the inservice phase, which covers the rest of the teacher's career. Despite the limitations of the knowledge base, this broad perspective enables assessment of the relative contribution of formal and informal influences on teachers' learning. Three general assertions are developed in this paper: (1) Formal arrangements for teacher education and training do not fit with what is known about how teachers learn to teach and how they improve their teaching over time; (2) Informal influences figure more prominently in learning to teach, but often have miseducative effects; and (3) Creating more appropriate arrangements to support teachers' learning involves changing not only what educators do but also how they think about learning to teach. (Author/JD)

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LEARNING TO TEACH

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Abstract

This paper offers a comprehensive approach to creating a data base on learning to teach. It is organized chronologically around a learning-to-teach continuum. The first section deals with the pretraining phase before prospective teachers even realize they are learning things that will shape their future teaching. The second section looks at the preservice phase when future teachers undertake their formal preparation. The third section examines the induction phase which coincides with the first year of teaching. The fourth section examines the inservice phase which covers the rest of the teacher's career. Despite the limitations of the knowledge-base, this broad perspective enables us to assess the relative contribution of formal and informal influences on teachers' learning. Three general assertions are developed: (1) that formal arrangements for teacher education and training do not fit with what is known about how teachers learn to teach and get better at teaching over time; (2) that informal influences figure more prominently in learning to teach, but often have miseducative effects; and (3) that creating more appropriate arrangements to support teachers' learning involves changing not only what educators do but also how they think about learning to teach and learning from teaching throughout the teacher's career.

LEARNING TO TEACH[1]

Sharon Feiman-Nemser[2]

In an essay on what it means to teach, Hawkins (1973) tells of an exchange between a veteran teacher of 35 years and a student teacher. The veteran commented that what held her to teaching after all these years was that there was still so much to be learned. The student teacher responded in amazement that she thought it could all be learned in two or three years. Hawkins observes:

> It may be possible to learn in two or three years the kind of practice which then leads to another twenty years of learning. Whether many of our colleges get many of their students on to that fascinating track or whether the schools are geared to a thoughtful support of such learning by their teachers is another matter. (p. 7)

The two teachers in Hawkins' story represent competing views of teaching and learning to teach. The student teacher believes that learning to teach is the special province of the beginner. Once a certain level of mastery is achieved, the necessity for further learning on the teacher's part is basically over. Since teaching can be mastered in a relatively short time (two or three years), it must be rather predictable and routine work. By contrast, the veteran teacher believes that the work of teaching cannot be based

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entirely on past knowledge and experience. It must be informed by knowledge derived from studying the particular students and classroom situation. Moreover, this teacher recognizes that the classroom is not only a place to teach children, but a place to learn more about teaching and learning. For her, learning is part of the job of teaching.

Hawkins clearly admires the veteran teacher who, after 35 years, continues to learn from teaching. Perhaps she is one of those exceptional persons whose zest for learning and dedication to teaching keep them going year after year. And yet, Hawkins does not focus on this teacher's individual qualities, qualities that no doubt characterized her before she became a teacher. Rather, he directs our attention to the institutional settings where teachers study and work. He asks whether the colleges that prepare teachers and the schools that employ them cultivate and support their capacity to learn from their teaching and to grow in their work. His observation implies that becoming a *learning* teacher is not only a matter of individual disposition; it also depends on how teachers are prepared and under what conditions they carry out their work.

Hawkins' story introduces the main concerns of this paper on how teachers learn to teach in relation to how they are taught. The argument has three premises: (1) that formal arrangements for teacher education and training do not fit with what is known about how teachers learn to teach and how teachers get better at teaching over time; (2) that informal influences figure more prominently in learning to teach than formal influences, but often have miseducative effects; and (3) that creating appropriate arrangements to support teachers' learning involves changing not only what educators *do*, but also how they *think* about learning to teach and learning from teaching throughout the teacher's career.

Teacher educators are fond of talking about the preservice-inservice continuum, expressing their view that professional education should be a continuous process, starting with initial preparation, moving on to induction, and continuing through the teacher's years of service. In fact, formal teacher education is discontinuous. No structures or concepts link preservice preparation to inservice education and training. Nor is learning to teach synonymous with teacher education. In fact, when teachers talk about their professional learning they rarely mention their education courses. Instead, they talk about the experience of teaching and the chance to observe and talk with other teachers. A comprehensive look at learning to teach must encompass what educators know about both formal and informal influences.

To discern what is known about learning to teach, educators must first decide what "learning to teach" means. Is it learning a socially prescribed role or mastering the content to be taught or completing a certification program? All these interpretations have been linked with the notion of learning to teach, and each points to a different body of research.

From studies of teacher socialization and teacher development, from research on teacher education and training at both the preservice and inservice levels, from literature on staff development and school improvement, and from autobiographies and descriptive accounts by teachers about their teaching experiences over time, educators can begin to construct a general picture of how someone learns to teach and improves at teaching over time. Rarely do educators address thie topic directly, however, and what educators know is far from adequate. Davies and Amershek (1969) in their conclusion about the research on student teaching--the most highly valued and widely studied aspect of preservice preparation--describe the state of the art:

> A review of the research leaves one with a great feeling of urgency to expedite the study of student teaching; given its ascribed importance in teacher education, it is alarming to find so little systematic research related to it. Discussions and descriptive reports are plentiful but comprehensive basic study of the processes involved is lacking. (p. 1384)

With few exceptions, the existing research tells us very little about the actual conduct of teacher preparation and inservice training. Nor does it say much about on-the-job learning.

This paper offers a more comprehensive approach to creating a data base on learning to teach. Organized chronologically around a learning-to-teach continuum, the paper has four sections. The first section focuses on the *pretraining* phase before prospective teachers even realize they are learning things that will shape their future teaching. The second section looks at the *preservice* phase when future teachers undertake their formal preparation. The third section examines the *induction* phase which coincides with the first year(s) of teaching. The fourth section examines the *inservice* phase which covers the rest of the teacher's career. In each phase I am particularly concerned with the relative contributions of formal and informal influences on the teacher's capacity for continued learning.

This broad perspective implies that the quality of teaching must be taken into account in any discussion of the quality of schooling. Effective schools have been defined as places where students learn. It is time to include in our definition a requirement about teachers' learning as well.

The Pretraining Phase: Early Influences on Learning to Teach

Before teachers start their formal pedagogical work, they have already had considerable informal preparation for teaching. From infancy onward, they have been taught many things by other people, most prominently their parents and teachers. They have also been exposed to patterns and ideas of teaching

and schooling that pervade their culture. Teacher educators tend to underestimate the pervasive effects of these formative experiences. There is little empirical research on the role of early experiences on learning to teach. Still, some researchers have argued that formal teacher preparation is not powerful enough to overcome the impact of early experiences. At least three different explanations of the impact of early experience have been offered.

An Evolutionary Account

Stephens (Note 1) proposes an "evolutionary" theory to account for basic pedagogical tendencies in teachers. He notes that human beings have survived because of their deeply ingrained habits of correcting one another, telling each other what they know, pointing out the moral, and supplying the answer. These tendencies have been acquired over the centuries and are lived out in families and classrooms. Thus children not only learn what they are told by parents and teachers, they also learn to be teachers. Just listen to the imitative play of young children, and you will hear them instruct one another as their parents and teachers do. Prospective teachers have their share of these spontaneous pedagogical tendencies, but they also have a sense of mission. According to Stephens, this combination is far more powerful than current teacher-training efforts.

A Psychoanalytic Account

Wright and Tuska (1968) look to psychoanalytic theory to explain how childhood makes a teacher. Their research focuses on the influence of important adults (mother, father, teacher) on the decision to teach and on subsequent teaching. Becoming a teacher is viewed as a way of becoming like the significant others in a person's childhood. For example, some elementary

teachers may unconsciously become like the interfering teachers who once frightened them, with the consequence that their pupils, in turn, become the victims they once were. Wright (1959) has also collected anecdotes, written by teachers, illustrating that, for many, a conscious identification with a teacher during childhood is important. The following is a typical example:

> One of the nicest parts of the day was when my teacher would read us a story. I watched very carefully how she looked, and listened to the way her voice sounded as she talked. At home, I would play school and talk to my imaginary children in exactly the same way that she had talked, retelling exactly the same stories . . . It all happened a long time ago, but it is still easy to remember how much this teacher meant to me. (p. 362).

A Socialization Account

Lortie (1965, 1975) emphasizes the powerful role that being a student plays in becoming a teacher. "Teachers start their professional preparation early in life, their entire school experience contributes to their work socialization" (1965, p. 56). From more than 10,000 hours of exposure to teachers, prospective teachers have stored up countless impressions of life in classrooms. Because "psyching out the teacher" may be crucial to a student's survival, it is often undertaken with considerable intensity. From this "apprenticeship of observation," students internalize models of teaching that are activated when they become teachers.

Lortie supports this theory of teacher socialization with interview data in which teachers acknowledge the influence of former teachers and the tangential role of their former training. While some teachers recognize this influence of the past, Lortie suggests that many are probably influenced in ways they do not perceive. In the press of classroom interaction, teachers end up imitating internalized models of past practice (e.g., doing what their second-grade teacher did when the children got restless).

The tendency of teachers to maintain their early preconceptions supports the argument that formal preparation does not challenge early informal influences. When teachers describe former teachers, for example, they rarely alter the assessments they made when they were younger. Their favorite teacher still represents good teaching. Formal training does not mark a separation between the perceptions of naive lay persons and the informed judgments of professionals.

It is clear that students remember their teachers, but there is little basis for assuming that they can place teachers' actions within a pedagogical framework. As Lortie (1975) writes, "what students learn about teaching is intuitive and imitative, rather than explicit and analytical; it is based on individual personalities rather then 'pedagogical principles'" (p. 62).

The Influences of Biography on Learning to Teach

Clearly biography is a powerful influence on learning to teach. Wright and Lortie stress the need for teachers to be freed from the "hand of the past," the influence of parents, teachers, and the culture at large. What Wright has in mind sounds closer to psychotherapy than education. What Lortie recommends is that future teachers be helped to examine their past, to see how it shapes their beliefs about the way schools ought to be. Unless future teachers get some cognitive control over prior school experience, it may influence their teaching unconsciously and contribute to the perpetuation of conservative school practices. On the other hand, Stephens has more faith in the adaptive pedagogical tendencies that have evolved over time and that make people capable of undertaking at least some aspects of teaching.

It is fruitful to look at these claims about the influence of the past in relation to the qualities that future teachers believe they bring to their professional preparation, and to their hopes and expectations about what they

will learn. Typically students pursuing a degree in elementary education cite warmth, patience, and empathy as qualities they possess that will make them effective teachers. Rarely do they mention intellectual strengths or subject matter knowledge. What they most hope to learn through their professional studies are instructional techniques, ways of diagnosing learning problems, and methods of classroom control (O'Shea, Note 2).

Many judge the adequacy of their formal preparation by the extent to which it gives them technical knowledge. Skills are necessary, but not sufficient in learning to teach. Unless formal training can also modify pre-existent images of teachers and teaching, future teachers may practice what their teachers did. The likelihood that professional study will affect what powerful early experiences have inscribed on the mind and emotions may depend on its power to cultivate images of the possible and the desirable along with the requisite know-how.

The Preservice Phase of Learning to Teach

Most people think that when students enter college with the intention of becoming teachers, they spend most of their four years preparing for that role. Actually, as Howey, Yarger, and Joyce (1978) point out, "the majority of degree requirements met by teacher education students are not related to learning about teaching, learning how to teach or demonstrating their ability to teach" (p. 25). Elementary education students spend 25% of their academic career in education courses and another 13% in some form of supervised practice. Secondary education majors spend less.

Still, many teacher educators and students expect a lot from professional education. Actually, education courses and field experience offer distinct occasions for learning to teach. They represent commitments to ways of knowing and coming to know—formal knowledge and first-hand experience--that typically go unarticulated and often compete with each other.

Formal Knowledge and Learning to Teach

Education courses are the most formal and systematic part of learning to teach. They offer an opportunity to expose future teachers to the knowledge base of the profession. What this knowledge base consists of is unclear. Some are confident about its value and promise; others point out the limitations of theory and research as a basis for educational practice.

The prevailing view, modeled after the natural sciences, is that general principles about good teaching can be derived from social science theory and research and applied in the classroom. This view is institutionalized in the structure of the standard preservice curriculum--separate courses in educational foundations (psychology, philosophy, sociology) and methods of teaching, followed by practice teaching.

Increasingly, field experiences are being attached to education courses. This may be an attempt to help students "see" the relevance of formal coursework to classroom problems and make connections they might not otherwise make. On the other hand, it may reflect a stronger faith in the experiential side of learning to teach. There is some evidence for the latter interpretation. In a survey of 270 institutions preparing teachers, 99% indicated that they offered early (before student teaching) field experiences such as observation, tutoring, working with small groups, and assisting with non-instructional tasks. Significantly, 25% reported that they had no stated objectives for the experienced (Webb, Note 3).

The list of courses taken by education students gives some indication of the knowledge presumed to be relevant to teaching. Unfortunately, we know very little about what these courses are like and how future teachers make sense of them. Teachers often say that their education courses are too theoretical and not sufficiently practical. Lortie (1975) interprets this

to mean that the courses hold out unrealistic goals and high expectations without providing the practical know-how to make things happen.

Lortie's interpretation may be persuasive; it is also problematic. First, it implies that teacher educators *could* give teachers the practical know-how to realize their ideals. Second, it ignores the power of ideals to challenge what is taken for granted in prior experience and current models. Third, it also ignores the limited supply of (1) articulated, organized knowledge about teaching, and (2) good teacher educators. For example, without a view of more equitable and responsive classrooms, future teachers are more susceptible to what Katz (1974) calls "excessive realism," accepting the kind of teaching they observe as the upper and outer limits of the possible.

How future teachers encounter formal knowledge may influence what they think about the contributions of theory and research to teaching. If education courses nourish the belief that theory and research can give teachers rules to follow, they undermine the teacher's own problem-solving capacity and convey a false security about the authority of science. Formal knowledge can provide ways of thinking and alternative solutions, but teachers must decide what their specific situation requires. Many preservice students want recipes. They rarely see a place for foundational knowledge except, perhaps, psychology. Even there they may often assume that psychology can provide prescriptions for classroom practice. James' (1904/1958) message to teachers bears repeating not only in relation to educational psychology, but also in relation to research on teaching, a relatively new source of content for education courses:

> You make a great, a very great mistake if you think that psychology, being the science of the mind's laws, is something from which you can deduce definite programmes and schemes and methods of instruction for immediate classroom use. Psychology is a science, and teaching is an art; and sciences never generate arts directly out of themselves. An intermediary inventive mind must make the application by using its originality. (pp. 23-24)

There is a prevailing myth that the university has a liberalizing influence on future teachers, an influence that is dissipated by the conservative influence of the schools during field experiences. Recent research on student teaching challenges this myth by showing how university seminars and supervisory conferences also encourage acquiescence and conformity to existing school practice (Tabachnick, Popkewitz, & Zeichner, 1979/1980). Education courses socialize future teachers too, but we know less about their message and its impact.

Student Teaching: Learning By Doing

Student teaching is generally viewed as a necessary and useful part of teacher preparation. Teachers typically regard it as the most valuable part of their preservice work. Even a critic like Conant (1963) called it "the one indisputably essential element in professional education."

Student teaching is also the most widely studied aspect of learning to teach at the preservice level. Most of the empirical research focuses on changes in the attitudes and behavior of student teachers as a result of their student-teaching experience and demonstrates Becker's (1964) assertion that people take on the characteristics required by the situations in which they participate. Some studies show how students become like their cooperating teachers, the professionals whom student teachers encounter most directly (Friebus, 1977). Some studies show that student teachers take on the attitudes and beliefs associated with the school bureaucracy. For example, a series of studies by Hoy (1967, 1968, 1969) and Hoy and Rees (1977) finds student teachers becoming more bureaucratic (e.g., more conforming and impersonal) and more custodial in their orientation by the end of their student teaching.

These findings are confirmed by a handful of field studies that describe how student teaching contributes to a utilitarian pespective that conflicts with the expressed purposes of teacher-education programs (Iannaccone, 1963; Tabachnick et al., 1979/1980; Fox, Grant, Popkewitz, Romberg, Tabachnick, & Wehlage, Note 4). A summary of findings from one of these studies illustrates the dominant patterns (Tabachnick, Popkewitz, & Zeichner, Note 5):

1. Student teaching involved a very limited range of activities and interactions. When teaching occurred, it was typically concerned with short-term skills or routine testing and management procedures.

2. Student teachers had little control over their classroom activities. Why something was taught was taken for granted and not questioned.

3. The student teachers defined the most significant problem of teaching as discipline. Keeping children busy and doing things that would insure that children moved through the lesson on time and in a quiet and orderly fashion became ends in themselves rather than means toward some specified educational purpose.

4. The student teachers seemed to develop a high degree of technical proficiency; however, they applied criteria of pupil success which were almost entirely utilitarian, separating their everyday activities from their ideas by maintaining a distance between theory and practice.

This research challenges the widespread belief that practical school experience necessarily helps people become good teachers. Long ago Dewey (1904/1965) warned against an early and exclusive focus on technique in field experiences because the prospective teacher would adjust his/her methods of teaching

> not to the principles he is acquiring but to what he sees succeed and fail in an empirical way from moment to moment; to what he sees other teachers doing who are more experienced and successful in keeping order than he is; and to the injunctions and directions given him by others. (p. 14)

While it may give future teachers a taste of reality, sutdent teaching can also foster bad habits and narrow vision. What helps to solve an immediate

problem may not be good teaching. A deceptive sense of success, equated with keeping order and discipline, is liable to close off avenues for further learning.

The Impact of Formal Preparation

It is impossible to understand the impact of preservice preparation without knowing more about what it is like. Sarason (1962) characterized the preparation of teachers as "an unstudied problem" and called for detailed descriptions of how teachers are actually trained. The need still exists although educators are beginning to know more about student teaching.

Research suggests that student teaching leaves future teachers with a utilitarian perspective in which getting through the day, keeping children busy, and maintaining order are the main priorities. When preservice training gives students technical knowledge, they feel prepared for teaching and satisfied with their program. Good teaching appears to be a matter of using the right technique; learning to teach requires being there. Schools alone are not responsible for shaping this utilitarian perspective; despite a rhetoric of reflection and experimentation, universities can also reinforce it.

Some researchers found that student teachers did not change their perspectives during student teaching. Rather, student teachers became more articulate about stating and more skillful about implementing the perspectives they came with (Tabachnick, Zeichner, Densmore, Adler, & Egan, Note 6). This confirms the powerful influences of early models and preconceptions that remain unchallenged by preservice preparation. Changes are continuous, not discontinuous which supports Lortie's thesis about the continuity of influence from generation to generation in teaching.

Many people, including future teachers, expect that preservice training prepares one for teaching. That seems unrealistic since teacher preparation

inevitably continues on the job. If teacher educators would acknowledge that reality, they could concentrate at the preservice level on developing beginning competence and laying a foundation for learning from teaching and work for appropriate structures to support on-the-job learning.

The Induction Phase of Learning to Teach

Under the best of circumstances, preservice teacher education can only provide a beginning. Whatever beginning teachers bring to their first teaching situation, that situation will have a powerful effect on them, shaping them to fit the requirements of the role and the place. Waller (1932) framed the issue almost 50 years ago when he wrote that those who enter the ranks of teachers

> do not know how to teach, although they may know everything that is in the innumerable books telling them how to teach. They will not know how to teach until they have got the knack of certain personal adjustments which adapt them to their profession, and the period of learning may be long or short. These recruits that face teaching as a life work are ready to learn to teach, and they are ready, though they know it not, to be formed by teaching. (p. 380)

At the same time, the first encounter with "real" (as opposed to student) teaching enables beginners to start seeking answers to their own questions. As Kohl (1976) puts it,

> the essentials of learning to teach begin when one has the responsibility for a class or group of young people. At that point, it begins to be possible to know what resources are needed, what questions need to be answered by more experienced teachers, and what skills one needs. (p. 11)

Thus the workplace is a setting for adaptation *and* inquiry during the first year of teaching.

Various labels (induction phase or transition phase) have been used to signal the fact that the first year of teaching has a character of its own, that it is different from what has gone before and likely to influence what is to come. Some go so far as to argue that what happens during the first year

of teaching determines not only whether someone remains in teaching but also what kind of teacher they become. This assumes that the first year is *the* critical year in learning to teach. A recent request for proposals from the National Institute of Education (Note 7) asserted this position:

> The conditions under which a person carries out the first year of teaching have a strong influence on the level of effectiveness which that teacher is able to achieve and sustain over the years; on the attitudes which govern teacher behavior over even a forty year career; and indeed, on the decision whether or not to continue in the teaching profession. (p. 3)

We have no longitudinal data to test these assumptions about the relationship between the induction period and the teacher's long term development. Much of what we know about the first year of teaching comes from firsthand accounts by beginning teachers who recall the year as an intense and stressful period of learning. Understandably, these accounts are subject to some limitations of perspective and are colored by emotion.

The Shock of Reality and Learning to Teach

Often beginning teachers approach their first assignments with idealistic and unrealistic expectations. After watching teachers for many years and participating in the routines and rituals of school life, beginning teachers may think they know what they are getting into. When they actually move to the other side of the teacher's desk, however, the once familiar scene looks strangely unfamiliar. In a chapter entitled "X Is for the Unknown" in a book appropriately titled *Don't Smile Until Christmas*, Richardson (1970) describes the combination of hopes and fears that she brought to her first job as a high school math teacher:

> I was going to be a good teacher--interesting and fair and encountering my students as people . . . I would regard each student as an individual, having dignity and worth. I would create a class atmosphere that was friendly and encouraging, in which a person could make a mistake without being made to feel he was an idiot. I would communicate enthusiasm for my subject.

> These imprecise, flattering notions of myself as teacher were the thoughts that brought me to Belden High School. I knew little of the school, other than it was in a changing neighborhood. . . .
>
> Despite my optimistic self-concept, my expectations for the year did not reflect complete confidence for I was uncertain of grading, discipline and parental contact . . . I also had preconceived notions of classroom mechanics. I anticipated three classes with no more than thirty-five students each. I hoped to receive copies of my text before school began so that I could begin planning. I was worried about what I would do on the first day. *From that first day, all my optimistic visions were gradually but steadily eclipsed by the reality which confronted me.* (p. 61, emphasis added)

Sometimes the first day of school proceeds smoothly as teachers and students size each other up, but the "honeymoon period" quickly ends and a sense of panic develops as beginning teachers realize how ill prepared they are for their teaching responsibilities. These responsibilities do not differ in any way from the responsibilities that an experienced teacher must handle (Lortie, 1975). Like experienced teachers, the beginning teacher must ready the room, organize the curriculum for the year, and plan activities for the opening day.

The need to act and the pressure to respond launch the beginning teacher on a period of trial-and-error learning. Lortie (1965) compares the beginner's entrance into the profession to Robinson Crusoe's struggle for survival.

> As for Defoe's hero, the beginning teacher may find that prior experience supplied him with some alternatives for action, but his crucial learning comes from his personal errors; he fits together solutions and specific problems into some kind of whole and at times finds leeway for the expression of personal tastes. Working largely alone, he cannot make the specifics of his working knowledge base explicit, nor need he, as his victories are private. (p. 59)

Basically, beginners work things out on their own. This leaves room for self expression, but it also narrows the range of alternatives that will be tried and increases the likelihood that the novice will misinterpret successes and failures. What helps in the short run may not be educative in the long run; nor will it necessarily build and sustain the teacher's capacity to learn from teaching and to keep asking questions.

Beginning teachers may come to believe that good teaching is something they figure out for themselves by trying one technique after another. Differences among teachers become matters of personal style. Such beliefs work against a commitment to keep on learning and to hold high standards of effective practice that make such learning possible.

Beginners' Problems and Where They Come From

A recurrent theme in accounts by beginning teachers is their attempt to establish a level of classroom control that allows them to teach (Fuchs, 1969; Ryan, 1970). Many first-year teachers are reluctant to assume the role of classroom leader. They are unsure about what to teach and how. They have little feel for students and insufficient experience to predict student response. They are also unclear about how to evaluate students and communicate with parents.

These problems are often linked to inadequate preparation at the preservice level; however, as McDonald (Note 8) hypothesizes, contextual and personality factors also play a part:

> Certainly some of the beginning teachers' floundering . . . is due to lack of adequate preparation in the fundamentals of instruction. Some of it is due to a lack of proper organization so that beginning teachers are prepared for the subjects they are to teach. Some is due to a lack of adequate support at the time that they are teaching --support in the form of prescriptive advice about how to cope with certain kinds of problems. An unknown portion derives from the characteristics of the life and personality of the individuals who are beginning teachers. (p. 203)

These four claims deserve some attention since they have implications for what might be done to prevent or ameliorate at least some of the problems of beginning teachers. In regard to the first claim, it is not clear whether a grounding in generic principles of teaching would help beginning teachers cope with the specific problems they may face. In fact, the extent to which a

preservice program can do something about most of the problems of beginning teachers is altogether unclear.

The second claim is more straightforward. If proper organization means getting textbooks to beginning teachers before school opens and assigning them to teach subjects for which they have some preparation, then there is no reason why new teachers should have to cope with such problems. There are institutional solutions for some of the problems of the beginning teacher.

What constitutes adequate support and appropriate advice for a beginning teacher is tricky. Newberry (Note 9) found, for example, that beginning teachers were quite selective about whom to turn to. They relied almost entirely on teachers at their grade level whose teaching ideologies seemed compatible with their own and who taught the way they wanted to.

Asking for help in order to get advice sets up a pattern for collegial interaction that depends on someone having a difficulty. Given this pattern, questions about teaching unrelated to problems will seem out of place (Little, Note 10). Under such circumstances it is hard to separate judgments of competence from discussions of practice.

Finally, the claim that some of the problems beginning teachers experience stem from their own personalities or life situations implies that some of their problems are not amenable to solution. If preservice programs are not selective, then the first year of teaching will become a point where some selection occurs. Not every problem of the beginning teacher can or should be resolved by formal intervention.

Should Support Be Provided?

Since the publication of Conant's (1963) report, which contained several specific recommendations about support for beginning teachers, there have

been repeated calls for the development of induction programs (Ryan, 1970; Howey & Bents, Note 11). Some experiemental programs have been implemented with federal or foundation support, but most beginners receive little help over and above what is available to all teachers (Grant & Zeichner, 1981). Two approaches to induction highlight some of the issues regarding support for beginning teachers.

For the past five years, the British have experimented with induction programs. Although there is some variation among the pilot programs, most share the following characteristics:

1. Beginning teachers have a teaching load reduced by up to 25%.
2. An experienced teacher is appointed to help a group of not more than 10 beginning teachers and is given release time to do so.
3. Special college courses are offered during the school year. These vary in length and do not carry credit or a tuition charge.

Whereas the British induction schemes are outside the assessment process, the state of Georgia has tied induction to the evaluation and permanent certification of beginning teachers. Each beginning teacher is regularly evaluated during the first year on the basis of 14 competencies that were identified through an extensive program of research and development funded by the state. Beginning teachers are also evaluated by their school administrators and by a master teacher certified in the same area. All three determine what remediation is necessary (e.g., work with a master teacher or formal course work) and when competence is achieved.

The assumption that beginning teachers should be "competent" or else get remediation ignores the fact that important aspects of learning to teach are associated with teaching experience over time. It also reinforces the view that teaching is relatively easy to master in a brief period of time. Furthermore, connecting induction with formal evaluation may legitimize a

tendency already strong among beginners: to value techniques that get results over understanding that grows slowly.

Survival and Development

While survival may be the paramount goal of beginning teachers, how they survive will have consequences for the kind of teacher they will become. McDonald (Note 12) argues that the strategies a teacher uses to cope with first-year problems become the basis for a style that endures.

> The beginning teacher focuses on what is necessary to "get the job done"--manage the class, prepare lessons, grade papers, teach each lesson. Effectiveness means doing these things reasonably well, without getting into trouble; it means being accepted, even liked by the students. The teaching practices which seem to produce these ends merge into a style, which--whatever its other merits--works for the beginner. This is his style, and he will rationalize it and ignore its limitations. (p. 44)

Future professional growth can be limited by teachers' reluctance to give up the very practices that helped them get through their first year.

Of course, it is also possible that the exhilaration of surviving the first year of teaching provides the necessary confidence to continue searching for better ways of teaching. It is unlikely that teachers with one year of experience will feel completely satisfied with their performance.

This interpretation highlights the tension between efforts to eliminate the problems of beginning teachers and efforts to support and sustain them in on-the-job learning. The view that problems should be prevented or eliminated overshadows the fact that problems often alert one to things that need work. If one has solutions in hand, why go on searching? Unnecessary trauma during the first year of teaching should certainly be avoided. But it is useful to subsume some of the problems of the beginning teacher under a perspective that looks at learning to teach in general and at learning from teaching over time.

On-The-Job Learning: The Inservice Phase

Stages of Teacher Development

Researchers and teacher educators have put forward descriptions of the "stages" teachers go through as they gain experience in teaching. Most of these descriptions posit three stages: a beginning stage of survival, a middle stage of consolidation, and a final stage of mastery. The stages are loosely tied to the amounts of teaching experience, even though there is a recognition of the fact that teachers change at different rates. As one teacher put it, "I was a beginning teacher for three years."

The first stage is generally associated with the first year of teaching. Burden (Note 13) provides a useful summary of the characteristics of "first-stage" teachers:

1. limited knowledge of teaching activities;
2. limited knowledge about the teaching environment;
3. conformity to an image of the teacher as authority;
4. subject-centered approach to curriculum and teaching;
5. limited professional insights and perceptions;
6. feelings of uncertainty, confusion and insecurity; and
7. unwillingness to try new teaching methods. (p. 7)

The second stage generally extends through the third or fourth year of teaching. Growing confidence and mastery of basic teaching tasks enable teachers to concentrate less on themselves and more on their teaching. Concerns about "Can I?" change to questions about "How to." Increased self-confidence encourages feelings of worth, and success provides some appropriate and reliable solutions to problems. Stage 2 teachers have extended planning from one day at a time to weeks. They have a better grasp of long term goals and are more comfortable with the teacher's role and their understanding of the problems and challenges of teaching begins to grow.

The third stage is characterized by a sense of confidence and ease. The mechanics of teaching and classroom management are well under control. Teacher concerns center on whether pupils are learning what the teacher is teaching and whether the instructional content is appropriate for students. Whereas the beginning teacher focuses on the immediate problem--today, this child, that lesson--mature teachers are interested in the overall pattern. They can take in the whole room at once and have some sense of the relationship between their classroom and the rest of the school. Some teachers begin to think about the role of the teacher and the school in society.

First-year teachers are confused and uncertain about many aspects of teaching. About five years later, if they are still teaching, most teachers feel confident, secure, and professionally competent. They know how things are done in their school, and they can function smoothly in the classroom. They have discovered that students are people and can allow students to have their own opinions. They do not necessarily think that they know all the answers, but they feel more secure in what they are trying to do. The extent of these changes comes through in the following retrospective observations about the first and fifth year of teaching taken from Burden's (1979) interviews with experienced teachers.

> My first year was frightening. It was all of a sudden the feeling of bringing everything I was supposed to know together and really doing something with it. I had a great feeling of responsibility and a feeling of maybe not being able to handle it. It was a lot of apprehension and a lot of wanting to do well. I think there was a feeling that I couldn't measure up. (p. 122)

But over time, the picture changes.

> I'm really feeling like I know what's going on and I feel that I am able to look more objectively at school and say this is where I want to go this year and with these kids. I'm able to do that now ahead of time a little more than before. And I'm able to "read" my class a little more quickly and know what they're going to need. I feel like I have more resources to draw from in handling situations and knowing what to teach and how to deal with people. So I do feel kind of like a mature teacher. (p. 124)

Teacher Development--Possible But Not Automatic

The stage descriptions suggest that a major part of learning to teach occurs on the job, in the first five to seven years. During this segment of the inservice phase, teachers master the craft of teaching in one form or another and learn to live the life of a teacher. How such changes come about and where teachers go from here is not well understood. The general impression is that with time, experience, and a little help, the necessary learning occurs. Actually, the stage descriptions reflect someone's view of the ideal path of professional growth, a path some teachers have taken. Characteristics associated with the third stage and beyond are attainable, but their attainment is not automatic (Floden & Feiman, Note 14).

Two pictures have been painted of what happens to teachers once they master the tasks of teaching. According to one view, teachers stabilize their teaching style, settle into workable routines, and resist efforts to change. According to the second view, teachers continue to change because they want to be more effective with students and because they need challenge and stimulation in their work. These teachers keep trying to learn more and to accomplish more with their students. How can the difference be accounted for? What do educators know about ways of helping teachers improve in their work?

There are two complementary perspectives on how to stimulate the professional development of teachers. One perspective focuses on meeting the needs of individual teachers. The underlying assumption is that teachers can achieve a professional level of practice if they have access to appropriate support and services. Teacher centers embody this perspective with their emphasis on work with individual teachers over time.

The second perspective looks at schools as a context for teachers' learning. The underlying assumption is that prevailing norms and patterns of

interaction in schools can limit or promote opportunities for professional development. Recent research on successful schools and staff development suggests the kinds of expectations and practices that can promote on-the-job learning.

In combination, these perspectives blend formal and informal approaches to teacher development. They suggest that the alternatives of boredom and burnout or growth in effectiveness are less a function of individual characteristics and more a reflection of the opportunities and expectations that surround teachers in their work.

Inservice Programs Ignore Teacher Development

Schools have no well-defined structures for helping teachers learn from the everyday experience of teaching, nor have they given priority to what teachers feel are their job-related needs. Most inservice programs are designed to help teachers meet certification requirements or comply with district objectives. Colleges and universities offer courses, and schools support this form of continuing education by granting salary increases for advanced degrees. If teachers find intellectual stimulation in formal study, they often have trouble seeing the connection with their daily classroom work. Districts mount inservice training to put new curriculum or management systems into operation. Too often the training is perfunctory with no follow-up help. As a result, teachers do not adapt new approaches to their own teaching situations and school practices do not change. In short, improving the practice of experienced teachers has not been taken seriously as a legitimate inservice priority.

A Teacher-Centered Approach to Teacher Development

What distinguishes teacher centers from most school district and university inservice programs is their responsiveness to teacher's self-defined

needs and their faith in teachers' potential for professional growth. Devaney and Thorn (Note 15) summarize the basic premises that make teacher centers a genuine alternative to conventional forms of inservice education:

> Teachers must be more than technicians, must continue to be learners. Long lasting improvements in education will occur through inservice programs that identify individual starting points for learning, build on teachers' motivation to take more not less responsibility for curriculum and instruction decisions in the school and classroom, and welcome teachers to participate in the design of professional development programs. (p. 7)

Warmth, concreteness, time, and thought--these are the enabling conditions that centers believe teachers need in order to develop (Devaney, Note 16). Teaching has been called a lonely profession. Often teachers feel unsupported and ill-prepared to do the job expected of them. Teacher centers provide a responsive, non-judgmental setting that promotes collegial sharing and provides support for the risks of change. "Concrete" refers to the hands-on curricular materials that teachers explore and construct in center workshops. From the center perspective, teachers must continuously create, adapt, and collect curriculum materials to meet the diverse and changing needs of their students. Concrete also refers to a focus on the specific and the particular in teaching. Many centers have advisory services and master teachers who consult on classroom problems either in the center or in the teacher's classroom.

It takes time to learn new things. Genuine change comes from an awareness of needs that evolves over time. Centers structure activities to give teachers time to discover their needs and those of their students. Increased responsibility for curricular and instructional decisions requires increased understanding. Centers try to engage teachers in serious study of subject matter and students.

Centers with a clear commitment to teacher development try to respond to immediate needs without losing sight of long-term goals. The strategy that typifies this developmental style is advisory work. Unlike inservice coordinators, the advisor is not responsible for implementing official policy. Unlike curriculum specialists and principals, the role carries no supervisory or evaluative functions. The focus is on concentrated work in the teacher's own situation toward helping teachers improve their practice. The long-term goal is to stimulate teachers' critical thinking about their work (Bussis, Chittenden, & Amarel, 1976).

This individualized form of inservice has something to offer teachers at every stage of development. Beginning teachers need support and advice from someone they trust as a mentor. Middle-stage teachers want practical assistance, but they also need the encouragement to look closely at what they are doing and why. Watts (Note 17) observes that the most important role for advisors working with middle-stage teachers is "to keep alive a vision of what education might become, far beyond what it is, and to insist on an attitude of inquiry, even when it is uncomfortable" (p. 8). Finally, the advisory role offers master teachers a chance to share their expertise with less experienced colleagues, which can also be a powerful form of professional development.

The teacher-center concept represents a serious effort to identify conditions that support teachers' learning. Still, centers have been criticized for emphasizing individual work and paying less attention to the effects of schools on individuals. It appears that patterns of participation in center activities and teachers' latitude to experiment in their classrooms are influenced by expectations in the schools where they work. There is no getting around the fact that it is easier to be a learning teacher in some schools than in others.

The School as a Setting for On-The-Job Learning

The daily work of teaching shapes teachers' notions about how one becomes a good teacher. It would not be surprising, for example, if many teachers believed that learning to teach was a matter of independent trial and error with occasional assistance from others. This view is built into the typical conditions of the first year of teaching and reflected in the norms that govern both asking for and offering help. Many teachers are cautious about revealing problems and reticent to enter the private domain of another teacher's classroom. This limits their chances to see advice played out or get feedback on their progress. The isolation of teachers in their classrooms also makes it easier to stick to comfortable practices without having to justify them in terms of students' learning.

Despite dominant patterns, schools differ. Little (Note 10) has identified two powerful norms that appear to characterize schools where teachers view their own continued learning as part of the job of teaching: the norm of collegiality and the norm of continuous improvement. The "norm of collegiality" refers to the expectation that improving one's teaching is a collective undertaking. The "norm of continuous improvement" refers to expectations that analysis, evaluation, and experimentation are tools of the profession that can help teachers be more effective. Both norms are shaped by the kinds of interactions that teachers have in the normal course of their work. These include

1. frequent talk among teachers about the practice of teaching,
2. frequent opportunities to observe and evaluate one another's teaching,
3. regular opportunities to design and evaluate teaching materials, and
4. regular opportunities to teach and learn from one another.

These interactions occur in various locations--training sessions, faculty meetings, teachers' lounges, hallways, and classrooms. They focus on specific

practices, not specific teachers, which helps to preserve self-respect and minimize barriers to discussion. The interactions tend to involve a large portion of the faculty. In short, collegial experimentation is a way of life in these schools.

Little calls these "the critical practices of adaptability" because they enable schools to respond to changing social conditions, including changes in student populations. Not surprisingly, they coincide with the enabling conditions associated with teacher centers. What unifies these efforts at school improvement and teacher development is a shared perspective on teachers and how they can be helped to improve their work. This perspective is relevant to various activities--curriculum development, inservice education, and innovation adoption.

A Point of View About Teacher/Staff Development

In studying effective inservice programs, researchers from the Rand Corporation discovered that successful districts did not have a *program* per se but a *point of view* that explicitly acknowledged teachers as professionals and visibly supported their efforts to grow and learn. One tangible sign of this point of view was the existence of a teacher center that provided a context for useful peer interaction, for cross-fertilization, and for peer evaluation. The researchers judged these informal activities as more important than any new technologies or formal center programs (McLaughlin, Note 18, p. 80). In an earlier study of federally-initiated change efforts, the same researchers found that successful projects emphasized local invention rather than the implementation of "validated products" (McLaughlin & Marsh, 1979). From the start, teachers were involved in the planning, and local leaders were relied on more than outside experts. Frequent project meetings gave teachers a forum

to relate the project to their own situation and to get support for trying new ideas. Classroom advising provided timely assistance. In short, the most successful projects were not "projects" at all, but an integral part of an ongoing process of problem solving and school improvement.

Successful change efforts, like successful inservice education, reflect an expectation that teachers can grow and improve in their work. They set into motion a process of professional learning that is adaptive, concrete, and tied to ongoing activities. They give teachers the skills that will enable them to identify and solve problems themselves.

Traditional approaches to inservice training and school reform reflect different expectations and practices. They try to eliminate the process of professional learning with teacher-proof packages and one-shot training by outside experts. They convey a message that teachers are deficient and that others (researchers, administrators, legislators) know better what teachers need to improve.

There is growing evidence that an approach that views teachers as professionals and visibly supports their efforts to learn is more effective and enduring than traditional approaches. The capacities that enable teachers to make something work are not unique to a given program or innovation. They are the same capacities that teachers use when they develop and evaluate materials, adapt their instruction to fit the needs of individual students, monitor their teaching, and make necessary changes. If schools were organized so that teachers engaged in these activities as part of their work, educators would not have to mount special training efforts in response to every new social mandate. The structures to deal with social change would already be in place.

Conclusions

This journey along the learning-to-teach continuum lends support to the arguments advanced at the beginning of this paper about the relationship between how teachers learn to teach and how they are taught. Despite the limitations of the knowledge base, a broad perspective enables educators to assess the relative contributions of formal and informal sources of teachers' learning and to see the mismatch between formal arrangments for teacher education and the actual processes of teacher learning. Adjusting this mismatch involves more than filling in the gaps or responding to immediate needs.

Learning to teach begins long before formal programs of teacher preparation. Its roots are personal experiences with parents and teachers and images and patterns of teaching shaped by the culture. Most preservice programs do not challenge these early influences that provide unexamined models of practice.

Educators know very little about what prospective teachers actually learn during the preservice phase of learning to teach, but what they do know indicates the preservice programs are not very powerful interventions. If schools were organized to support on-the-job learning, perhaps expectations for preservice teacher education could be adjusted to fit more realistic and appropriate goals.

Whatever preservice preparation is or could be, a major part of learning to teach inevitably occurs on the job. Some have called the first year of teaching *the* formative phase in the teacher's career. Moreover, studies of teacher development suggest that teachers only *begin* to concentrate on the relation between what they do as teachers and what students learn *after* they master the basic tasks of teaching, somewhere around their fifth year.

Despite the centrality of learning on the job, helping teachers study their practice and make appropriate changes has not been considered a legitimate priority for inservice programming. Even the current interest in induction programs for beginning teachers is shortsighted if the primary intent is to ease the trauma of the first year of teaching rather than to help teachers learn from their classroom behavior and its consequences.

Given the relative impotence of formal programs at both the preservice and inservice levels, learning to teach is mostly influenced by informal sources, especially the experience of teaching itself. Experience is not always a good or effective teacher, however, and the problematic role of first-hand experience is apparent at every phase of the learning-to-teach continuum (Buchmann & Schwille, in press; Feiman-Nemser & Buchmann, Note 19).

In the pretraining phase, prospective teachers store up countless impressions of teaching from more than 10,000 hours of teacher watching. Formal preparation does not offset these early experiences, which contribute to the perpetuation of conservative school practice.

Teachers rate student teaching as the most valuable part of their preservice preparation. Research on student teaching suggests that the experience fosters a utilitarian perspective and a view of good teaching as a matter of maintaining order and keeping kids busy.

The first year of teaching is generally considered a critical time in learning to teach, but most beginning teachers have to flounder on their own. This strengthens their attachment to practices that helped them survive and reinforces a belief that learning to teach is a matter of independent trial and error.

In general, the isolation of teachers in their classrooms makes it easier to stick to comfortable practices without having to justify them. School

norms often limit collegial interaction to giving advice and keep teachers from scrutinizing their own and each other's practice. Improvements in teaching are linked to ideas imported from the outside, not to the ongoing responsibilities of teachers themselves.

Simple adjustments such as giving more time for classroom experience at the preservice level, providing support to beginning teachers, and placing more importance on teachers' sharing their experiences with one another may appear to realign formal teacher education and actual processes of learning to teach. They are not likely to improve teaching or teacher education, however, unless educators pay close attention to the content and context of these experiences. Furthermore, without appropriate structures in formal teacher preparation and a school culture that supports learning from teaching, educators cannot take advantage of the educative potential of teaching experience or guard against its miseducative tendencies.

Learning to teach is a bigger job than universities, schools, experience, or personal disposition alone can accomplish. Recognizing that fact, educators can begin to develop a concept of learning to teach that fits the reality and fosters a vision of the possible.

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